



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/679,807	10/06/2003	Jason A. Gayman	P17099	3326
28062	7590	12/09/2004	EXAMINER	
BUCKLEY, MASCHOFF, TALWALKAR LLC 5 ELM STREET NEW CANAAN, CT 06840				NGUYEN, VINCENT Q
		ART UNIT		PAPER NUMBER
		2858		

DATE MAILED: 12/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/679,807	GAYMAN, JASON A.
	<b>Examiner</b>	<b>Art Unit</b>
	Vincent Q Nguyen	2858

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is **FINAL**.                  2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_ is/are allowed.
- 6) Claim(s) 1,2,7,8,13-18 and 23 is/are rejected.
- 7) Claim(s) 3-6,9-12 and 19-22 is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date 10/06/2003.
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 7, 8, 13-18, 23, are rejected under 35 U.S.C. 103(a) as being unpatentable over Breinlinger (6,679,628).

Regarding claims 1, 7, 17, Breinlinger discloses a method and apparatus comprising the steps of (Figure 4, 2B and 3A) transmitting a first current through a diode (Step 402); determining a first voltage across the diode (Step 404), the first voltage associated with the first current; transmitting a second current through the diode (Step 408); determining a second voltage across the diode (Step 410), the second voltage associated with the second current; and determining a temperature based at least in part on the first voltage (Step 414).

Breinlinger does not disclose the step of transmitting a third current through the diode; determining a third voltage across the diode, the third voltage associated with the third current.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the step of transmitting a third current through the diode and determining a third voltage across the diode into the system of Breinlinger

Art Unit: 2858

because transmitting the third current and measuring the third voltage does not require the system of Breinlinger to change the function.

Regarding claims 2, 8, 18, does not explicitly disclose the step of determining the effective series resistance of a path associated with the diode based at least in part on the first voltage, the second voltage.

Although Breinlinger does not explicitly discloses, it would have been obvious to one of ordinary skill in the art at the time the invention was made to recognize that the voltage across the diode would relate to the resistance of the path associated with the diode (Column 1, lines 43-59).

Regarding claims 13, 14, Breinlinger does not disclose a second diode.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the second diode into the system of Breinlinger since it has been held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced (See MPEP 2144.04 *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960)).

Regarding claims 15, 23, Breinlinger discloses (Figure 3A) an analog-to-digital converter (310) and a microcontroller (312).

Regarding claim 16, Breinlinger does not disclose a second diode.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the second diode into the system of Breinlinger for the same reason as set forth in claim 13.

***Allowable Subject Matter***

3. Claims 3-6, 9-12, 19-22, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

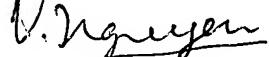
***Contact Information***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vincent Q Nguyen whose telephone number is (571) 272-2234. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, N. Le can be reached on (571) 272-2233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Vincent Q. Nguyen  
Primary Examiner  
Art Unit 2858



November 30, 2004